

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte CHRISTER STROM

Appeal No. 2005-2101
Application No. 09/922,504

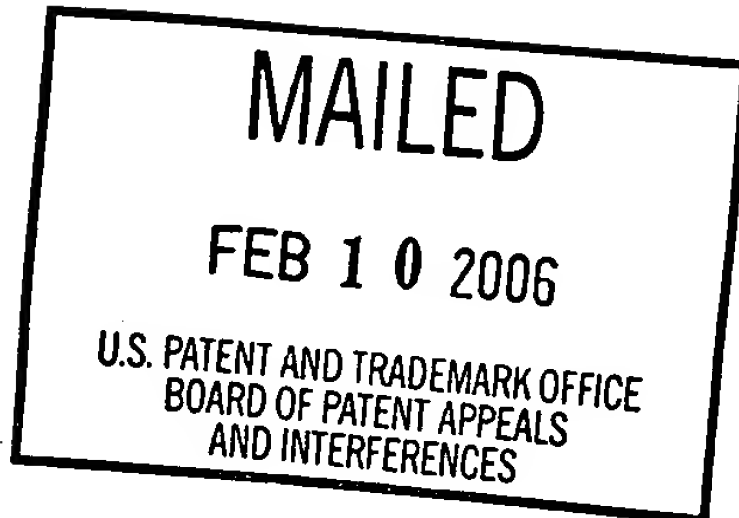
HEARD: JANUARY 24, 2006

Before FRANKFORT, CRAWFORD and BAHR, Administrative Patent Judges.
FRANKFORT, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the examiner's final rejection of claims 1 through 7, all of the claims remaining in the application. Claims 8 through 14 have been canceled.

Appellant's invention relates to a ventilator of the type having an inspiratory unit and an expiratory valve for regulating a flow of breathing gas, and a control unit for controlling the inspiratory unit and expiratory valve to, among other things, generate a "recruitment phase" with an elevated basic pressure for



the breathing gas, with a plurality of breaths superimposed on the elevated basic pressure and an increased breathing rate with no withdrawal of breathing gas. As noted on page 1 of the specification, "[d]uring a recruitment phase, the pulmonary alveoli are opened with a pressure (usually higher than the normal inspiratory pressure for the patient), enabling them to remain open when exposed to a lower pressure during a subsequent period of treatment." While recognizing the existence of certain prior procedures for instituting a recruitment phase (specification, page 2), appellant maintains that the procedure described and claimed in the present application has a number of advantages over the prior art procedures, i.e., while providing a procedure that is relatively simple to carry out, the static pressure, combined with the superimposed breaths, leads to more effective opening of the alveoli and improved scavenging of carbon dioxide. Independent claim 1 is representative of the subject matter on appeal and a copy of that claim can be found in Appendix A of appellant's brief.

The single prior art reference relied upon by the examiner in rejecting the appealed claims is:

Bird

5,862,802

Jan. 26, 1999

Claims 1 through 4 and 7 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Bird.

Claims 5 and 6 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Bird.

Rather than attempt to reiterate the examiner's full commentary with regard to the above-noted rejections and the conflicting viewpoints advanced by the examiner and appellant regarding the rejections, we make reference to the final rejection (mailed January 12, 2004) and examiner's answer (mailed September 22, 2004) for the reasoning in support of the rejections, and to appellant's brief (filed June 14, 2004) and reply brief (filed November 22, 2004) for the arguments thereagainst.

OPINION

In reaching our decision in this appeal, we have given careful consideration to appellant's specification and claims, to the applied prior art Bird patent, and to the respective positions articulated by appellant and the examiner. As a consequence of our review, we have made the determinations which follow.

With respect to the rejection under 35 U.S.C. § 102(b) based on Bird, the examiner urges that Bird discloses a ventilator comprising an inspiratory unit (Fig. 5); an expiratory valve (143) shown in Figure 1; and a control unit for controlling the inspiratory unit and expiratory valve to regulate flow of breathing gas by generating a recruitment phase with an elevated basic pressure for the breathing gas, with a plurality of breaths superimposed on the elevated basic pressure and an increased breathing rate. See page 3 of the answer for a full statement of the examiner's position.

Like appellant, we note that the Bird patent has no express disclosure relating to a "recruitment phase" or with regard to a "control unit for controlling said inspiratory unit and said expiratory valve to regulate a flow of breathing gas by generating a recruitment phase with an elevated basic pressure for said breathing gas, with a plurality of breaths superimposed on said elevated basic pressure and an increased breathing rate with no withdrawal of said breathing gas," as set forth in appellant's independent claim 1. The valve (143) pointed to by the examiner in Figure 1 of Bird is part of the oscillatory diffusion module (12) and identified as an "expiratory metering valve" (col. 9, line 48)

which is connected via its inlet port (142) to receive gas from an inspiratory metering valve (139) and which has an outlet port (147) connected to a reservoir service socket (64) and thence to a bag-like entrainment reservoir (69). Operation of the expiratory metering valve (143) is discussed in column 15, lines 10-56, of the Bird patent and seems to relate to creation of a "pneumatic clock" (col. 15, lines 22-23) which determines the bleed down rate of the diaphragmatic servoing pressure in the oscillator cartridge (123) and determines how long the oscillator cartridge gate valve remains closed.

By contrast, the expiratory valve (14) of appellant's invention operates under control of a control unit (16) to regulate the outflow of breathing gas from the respirator (2) and along with control of the inspiratory unit (8) to generate the pressure and flows to which the patient is to be subjected, particularly the specific form of "recruitment phase" set forth in claim 1 on appeal. As appellant has noted in the brief, the corresponding expiratory valve of Bird (Fig. 1) would appear to be the exhalation valve assembly (228) shown as part of the breathing circuit (16) and which is likewise not under control of a "control unit" like that set forth in the claims on appeal.

As appellant has argued in the brief and reply brief, there is no showing in Figure 1 of Bird, or otherwise discussed in that patent, of a "control unit" associated with the expiratory metering valve (143) to permit active control of the metering valve and of the inspiratory unit of the respirator therein so as to regulate a flow of breathing gas by generating a "recruitment phase," as set forth in claim 1 on appeal. Although the metering valve (143) is described at column 15, line 49, as being adjustable, there is no disclosure in Bird of exactly when or how the valve is adjusted, and clearly no disclosure of a "control unit" that controls the valve (143) in a manner necessary to achieve the result defined in the claims on appeal. The examiner's attempt in the answer (page 3) to point to the broad disclosure of Bird at column 2, lines 45-48; column 3, lines 1-4; and column 4, lines 8-10 as support for such a "control unit" is not well founded, since those portions of the patent specification merely set forth broad objectives to be achieved by the invention therein and do not describe, discuss or mandate a "control unit" like that defined in the claims on appeal.

For the foregoing reasons, we will not sustain the examiner's rejection of claims 1 through 4 and 7 under 35 U.S.C. § 102(b) based on Bird.

Concerning the rejection of dependent claims 5 and 6 under 35 U.S.C. § 103(a) based on Bird, we again point to the failure of Bird to disclose or suggest a "control unit" like that defined in the claims on appeal. Moreover, with regard to the examiner's reliance on Figures 24 and 32 of Bird (answer, pages 3-4), we share appellant's position as set forth in the reply brief that those figures of Bird's drawings are associated with embodiments of the invention distinct from that seen in Figure 1 of Bird and which do not even show or rely on an expiratory metering valve (143). Thus, we will not sustain the rejection of claims 5 and 6 under 35 U.S.C. § 103(a).

REVERSED

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9

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